PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Narito TATEISHI

Appln. No.: 10/574,479

Confirmation No.: 2355

Filed: October 5, 2006

For: NERVE REGENERATION PROMOTERS

Docket No: Q94241

Group Art Unit: 1627

Examiner: CARTER, KENDRA D

DECLARATION UNDER 37 C.F.R. § 1.132

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Tsutomu AKIYAMA, hereby declare and state:

THAT I reside at 1-12-7, Jyounan-cho, Takatsuki-city, Osaka 569-0056, JAPAN;

THAT I graduated from Osaka University, Faculty of Pharmaceutical sciences in March 1995;

THAT I was awarded a Master degree of Pharmaceutical from Osaka University in March 1997; and

THAT I have been employed by Ono Pharmaceutical Co., Ltd. since April 1997, and have been engaged in the study of Pharmacology, Molecular-biochemistry and Brain Science at the Research Institute of that company.

I have read the Office Action dated June 21, 2010. My opinion is based on the following facts:

Ohuchida *et al.* (US 6,201,021 B1) relates to invention that some neurodegenerative diseases such as cerebral stroke are based on neuronal death caused by abnormally activated astrocyte (reactive astrocytes); that the neuronal death is inhibited by administration of (2R)-2-propyloctanoic acid which inhibits inducing reactive astrocytes; and that the diseases are treated as a result. Therefore, although there is description in Ohuchida *et al.* that (2R)-2- propyloctanoic acid inhibits neuronal death by reactive astrocytes, there is no description or indication at all that glia cells are differentiated and proliferated into nerve stem cells or nerve precursor cells by administration of (2R)-2- propyloctanoic acid.

Namely, even if Ohuchida *et al.* are combined with Mazo *et al.* which relates to improvement of brain dysfunction by transplantation of nerve cells, the function of (2R)-2-propyloctanoic acid which induces glia cells into cerebral nerve stem cells and cerebral nerve precursor cells, specifically the function as culture additive *in vitro* cannot be expected.

The method of the present invention is a method of culturing glia cells for inducing nerve stem cells or nerve precursor cells prior to transplantation using a media comprising (2R)-2-propyloctanoic acid which induces proliferation and differentiation of the glia cells into nerve stem cells for transplant or nerve precursor cells for transplant. When the present application was filed, it was not known at all that (2R)-2-propyloctanoic has a function of accelerating proliferation and differentiation of glia cells such as astrocytes into cerebral nerve stem cells for transplant and cerebral nerve precursor cells for transplant.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 09/14/2010

Tsutomu Akiyama
Tsutomu AKIYAMA